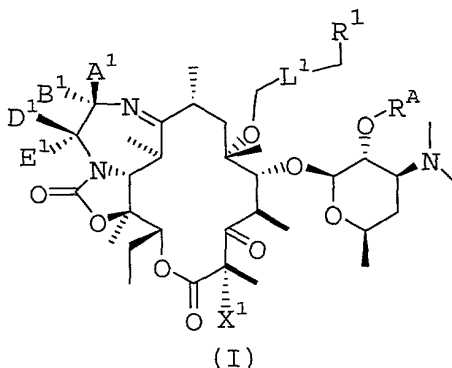


WHAT IS CLAIMED IS

1. A compound having formula (I)



5 in which,

two of A¹, B¹, D¹, and E¹ are hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, -CN, -OH, -SH, -C(O)H, -C(O)R², -C(O)OH, -C(O)OR², -C(O)NR³R⁴, or alkyl substituted with one, two, or three substituents independently selected from the group consisting of -CN, -OH, -SH, halo, aryl, heteroaryl, heterocyclyl, -OR², -SR², -C(O)H, -C(O)R², -C(O)OH, -C(O)OR², -CH=N-OR², -OC(O)R², -OC(O)OR², -C(O)NR³R⁴, -OC(O)NR³R⁴, -NR³R⁴, -N(R⁵)C(O)H, -N(R⁵)C(O)R², -N(R⁵)C(O)NR³R⁴, -N(R⁵)SO₂R², -OR², -SR², -S(O)R², -SO₂R², and -SO₂NR³R⁴, and the remainder are hydrogen; or

A¹ and D¹, A¹ and E¹, B¹ and D¹, or B¹ and D¹ together are one- to five-membered alkylene or two- to five-membered heteroalkylene, and the remainder are hydrogen; or

A¹ and B¹ together are one- to seven-membered alkylene or two- to seven-membered heteroalkylene, and D¹ and E¹ are hydrogen; or

D¹ and E¹ together are one- to seven-membered alkylene or two- to seven-membered heteroalkylene, and A¹ and B¹ are hydrogen;

L¹ is selected from the group consisting of C≡C, (E)-CH=CH, and (Z)-CH=CH;

X¹ is selected from the group consisting of hydrogen and fluoride;

30 R^A is selected from the group consisting of hydrogen and R^P, in which R^P is a hydroxyl protecting group; and

R¹ is selected from the group consisting of aryl, heteroaryl, and heterocycle;

in which, for the foregoing,

35 each aryl, heteroaryl, and heterocyclyl is unsubstituted or substituted with one, two, three, four, or five substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, halo, -CN, -OH, -SH, -NH₂, -NO₂, (O), -CF₃, -CH₂CF₃, -CF₂CF₃, -OCF₃,
40 -OCH₂CF₃, -OCF₂CF₃, -OR³⁰, -SR³⁰, -S(O)R³⁵, -SO₂R³⁵, -C(O)H, -C(O)R³⁵, -C(O)OH, -C(O)OR³⁵, -NH(R³⁵), -N(R³⁵)(R^{35'}), -C(O)NH₂, -C(O)NH(R³⁵), -C(O)N(R³⁵)(R³⁶), -OC(O)R³⁵, -OC(O)OR³⁵, -OC(O)NH₂, -OC(O)NH(R³⁵), -OC(O)N(R³⁵)(R³⁶), -NHC(O)H, -NHC(O)R³⁵, -NHC(O)OR³⁵, -NHC(O)NH₂, -NHC(O)NH(R³⁵),
45 -NHC(O)N(R³⁵)(R³⁶), -SO₂NH₂, -SO₂NH(R³⁵), -SO₂N(R³⁵)(R³⁶), R⁴⁰, and alkyl substituted with one or two substituents independently selected from the group consisting of halo, -CN, -OH, -SH, (O), -OR³⁰, -SR³⁰, -C(O)OH, -C(O)OR³⁵, -NH₂, -NH(R³⁵), -N(R³⁵)(R³⁶), -C(O)NH₂, -C(O)NH(R³⁵),
50 C(O)N(R³⁵)(R³⁶), -OC(O)R³⁵, -OC(O)NH₂, -OC(O)NH(R³⁵), OC(O)N(R³⁵)(R³⁶), -SO₂NH₂, -SO₂NH(R³⁵), -SO₂N(R³⁵)(R³⁶), and R⁴⁰;

R³⁰ is selected from the group consisting of alkyl and alkyl substituted with a substituent selected from the group
55 consisting of halo and OR⁴⁵;

R³⁵ and R³⁶ are independently selected alkyl;

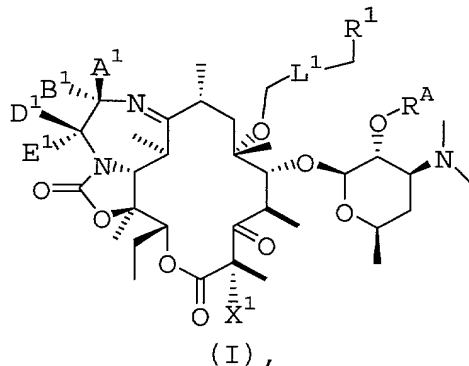
R⁴⁰ is selected from the group consisting of phenyl, naphthyl, furyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyrazolyl, isoxazolyl, isothiazolyl, 1,2,3-oxadiazolyl, 1,2,3-thiadiazolyl, 1,3,4-thiadiazolyl, 1,2,3-
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triazolyl, tetrazolyl, pyridyl, pyrazinyl, pyrimidinyl,
 pyrrolidinyl, inidazolidinyl, piperidinyl, piperazinyl,
 morpholinyl, or thiomorpholinyl, each of which is
 unsubstituted or substituted with one, two, or three
 65 substituents independently selected from the group
 consisting of alkyl, alkenyl, alkynyl, cycloalkyl, halo,
 -CN, -OH, -SH, -NO₂, (O), -CF₃, -CH₂CF₃, -CF₂CF₃, -OCF₃,
 -OCH₂CF₃, -OCF₂CF₃, -OR⁴⁵, -SR⁴⁵, -S(O)R⁵⁰, -SO₂R⁵⁰, -C(O)H,
 -C(O)R⁵⁰, -C(O)OH, -C(O)OR⁵⁰, -NH₂, -NH(R⁵⁰), -N(R⁵⁰)(R⁵¹),
 70 -C(O)NH₂, -C(O)NH(R⁵⁰), -C(O)N(R⁵⁰)(R⁵¹), -OC(O)R⁵⁰,
 OC(O)OR⁵⁰, -OC(O)NH₂, -OC(O)NH(R⁵⁰), -OC(O)N(R⁵⁰)(R⁵¹),
 NHC(O)H, -NHC(O)R⁵⁰, -NHC(O)OR⁵⁰, -NHC(O)NH₂, -NHC(O)NH(R⁵⁰),
 -NHC(O)N(R⁵⁰)(R⁵¹), -SO₂NH₂, -SO₂NH(R⁵⁰), and -SO₂N(R⁵⁰)(R⁵¹);

R⁴⁵ is alkyl;

75 R⁵⁰ and R⁵¹ are independently selected alkyl.

2. A compound of Claim 1 having formula (I)



in which

5 A¹, B¹, D¹, and E¹ are hydrogen;

X¹ is hydrogen;

L¹ is C≡C;

R^A is hydrogen;

R¹ is selected from the group consisting of aryl,

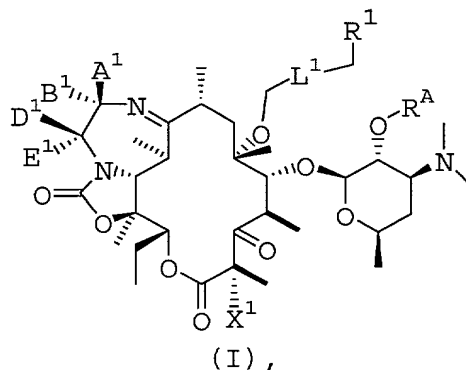
10 heteroaryl,

in which the aryl is phenyl and the heteroaryl is pyridyl and quinolinyl, and

in which the foregoing aryl and each foregoing heteroaryl is unsubstituted or substituted with a substituent selected from the group consisting of alkenyl and R^{40} ,

in which R^{40} is selected from the group consisting of furyl, pyridyl, 1,2,3-thiadiazolyl, thiazolyl, thienyl, and tetrazolyl, each of which is unsubstituted or substituted with one alkyl substituent.

3. A compound of Claim 1 having formula (I)



in which

5 A^1 , B^1 , D^1 , and E^1 are hydrogen;

X^1 is hydrogen;

L^1 is $C\equiv C$;

R^A is hydrogen;

10 R^1 is selected from the group consisting of aryl and heteroaryl,

in which the aryl is phenyl and the heteroaryl is pyridyl and quinolinyl, and

in which the foregoing aryl and each foregoing heteroaryl is unsubstituted or substituted with a substituent selected from the group consisting of C_2 -alkenyl and R^{40} ,

in which R⁴⁰ is selected from the group consisting of
furyl, pyridyl, 1,2,3-thiadiazolyl, thiazolyl, thienyl, and
tetrazolyl, each of which is unsubstituted or substituted
20 with one C₁-alkyl substituent.

4. A composition for prophylaxis or treatment of
methicillin-resistant staphylococcus aureus infections in a
fish or a mammal, the composition comprising a
therapeutically effective amount of a compound of claim 1.

5

5. A method for prophylaxis and treatment of
methicillin-resistant staphylococcus aureus infections in a
fish or a mammal comprising administering thereto a
therapeutically effective amount of a compound of claim 1.

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6. A compound of claim 1 selected from the group
consisting of

(3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-pyridin-2-
5 ylbut-2-ynyl)oxy)dodecahydro-14,1-
(epiazenoethano)oxacyclotetradecino[4,3-d][1,3]oxazol-10-yl
3,4,6-trideoxy-3-(dimethylamino)-β-D-xylo-hexopyranoside,
(3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-(4-(1,2,3-
10 thiadiazol-5-yl)phenyl)but-2-ynyl)oxy)dodecahydro-14,1-
(epiazenoethano)oxacyclotetradecino[4,3-d][1,3]oxazol-10-yl
3,4,6-trideoxy-3-(dimethylamino)-β-D-xylo-hexopyranoside,
(3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-quinolin-3-
15 ylbut-2-ynyl)oxy)dodecahydro-14,1-
(epiazenoethano)oxacyclotetradecino[4,3-d][1,3]oxazol-10-yl
3,4,6-trideoxy-3-(dimethylamino)-β-D-xylo-hexopyranoside,
(3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-(4-thien-2-
20 ylphenyl)but-2-ynyl)oxy)dodecahydro-14,1-

(epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside,
 (3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
 3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-(4-(1,3-
 25 thiazol-2-yl)phenyl)but-2-ynyl)oxy) dodecahydro-14,1-
 (epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside,
 (3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-11-((4-(4-
 (2-furyl)phenyl)but-2-ynyl)oxy)-3a,7,9,11,13,15-hexamethyl-
 30 2,6,8-trioxododecahydro-14,1-
 (epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside,
 (3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
 3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-(4-
 35 vinylphenyl)but-2-ynyl)oxy) dodecahydro-14,1-
 (epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside,
 (3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
 3a,7,9,11,13,15-hexamethyl-2,6,8-trioxo-11-((4-(4-pyridin-2-
 40 ylphenyl)but-2-ynyl)oxy) dodecahydro-14,1-
 (epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside,
 and
 (3aS,4R,7R,9R,10R,11S,13R,15R,15aR)-4-ethyl-
 45 3a,7,9,11,13,15-hexamethyl-11-((4-(4-(2-methyl-2H-tetraazol-
 5-yl)phenyl)but-2-ynyl)oxy)-2,6,8-trioxododecahydro-14,1-
 (epiazenoethano) oxacyclotetradecino [4,3-d] [1,3] oxazol-10-yl
 3,4,6-trideoxy-3-(dimethylamino)- β -D-xylo-hexopyranoside.